

BRIEFER ARTICLES

SIMPLE DEVICE FOR WEIGHING SEEDS

(WITH ONE FIGURE)

In biological work it is often necessary to determine the weight of individual seeds. The use of the usual analytical balance is too slow if large quantities are to be weighed, and the spiral spring balances are often not delicate enough to weigh small seeds.

A glass scale can be made in a short time which is accurate and permits rapid work. A piece of glass tubing is heated over a Bunsen burner and drawn into a long rod. The rod should be about 1 or 1.5

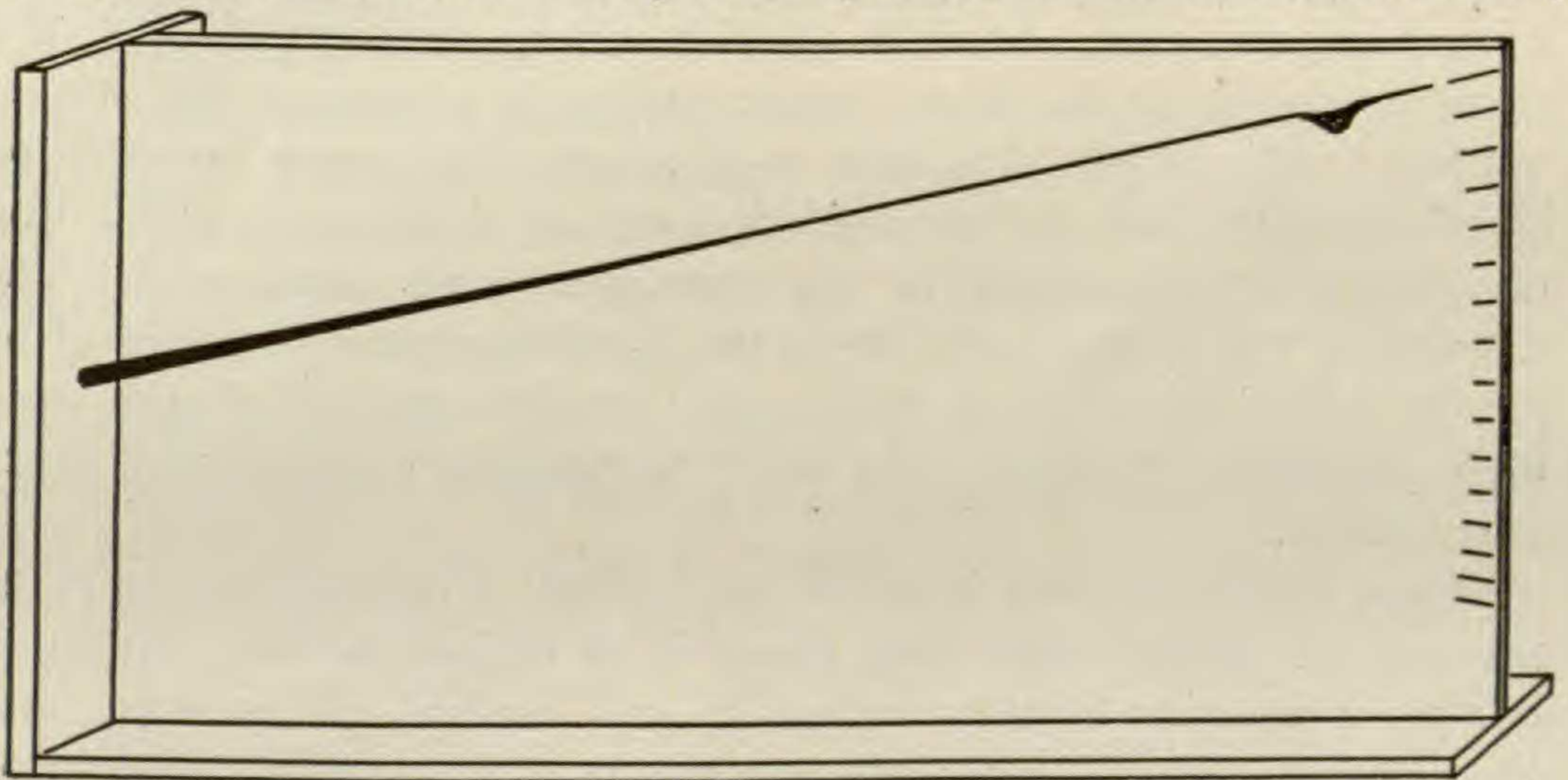


FIG. 1

mm. thick and 50 cm. long for weighing seeds of corn or beans. The tip of the rod should be bent and a paper tray glued on. A bristle or piece of fine wire attached to the tray serves as a pointer. The base of the rod is inserted in a hole bored in the upright base board. The scale is graduated by using the weights for the analytical balance (fig. 1). The writer has two scales on the same stand, one for beans and corn which is accurate to one centigram, and one for wheat and oats which is fairly accurate to one milligram.

If the forefinger of the left hand is placed under the tray while placing the grains on with a pair of forceps the pointer will come to rest almost immediately. With a little practice 300-400 seeds can be weighed per hour. Constant use for several weeks at a time does not seem to cause any loss in elasticity of the glass rod, but the scale should be checked occasionally.—KARL SAX, *Maine Agricultural Experiment Station, Orono, Maine.*